

DEPARTMENT OF INDUSTRIAL RELATIONS
Occupational Safety and Health Standards Board
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SECOND NOTICE OF PROPOSED MODIFICATIONS TO

CALIFORNIA CODE OF REGULATIONS

General Industry Safety Orders,
Article 10.1, Section 3401, Section 3402,
New Sections 3402.1 - 3402.3,
Sections 3403 - 3410, New Section 3410.1, and Section 3411

Fire Fighters' Personal Protective Clothing and Equipment – AB 2146 (2014)

Pursuant to Government Code section 11346.8(c), the Occupational Safety and Health Standards Board (Standards Board or Board) gives notice of the opportunity to submit written comments on the above-named standards in which modifications are being considered as a result of public comments and/or Board staff consideration.

On March 18, 2021, the Standards Board held a Public Hearing to consider revisions to title 8, section 3401, section 3402, new sections 3402.1 - 3402.3, sections 3403 - 3410, new section 3410.1, and section 3411 of the General Industry Safety Orders. The Standards Board received written and oral comments on the proposed revisions. The standards were modified as a result of these comments and Board consideration, and on October 29, 2021 a 15-Day Notice was issued.

This second 15-Day Notice is a result of further comments from stakeholders and added Board consideration. There has been a non-substantial clarification changing the use of "section" to "subchapter" within the exception to section 3402.3(a). Additionally, modifications are now proposed for section 3402.3(c)(1) that include three subchapters within Chapter 4 (Program) of NFPA 1851, 2014 Edition, that will become effective one year from the effective date of the regulation.

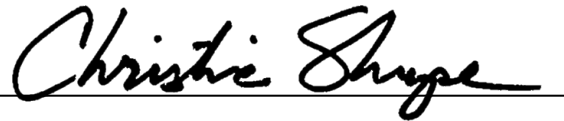
A copy of the text of the standard as originally proposed, with the modification clearly indicated, is attached. Anything that has been added is indicated by a bold double underline, and anything that has been removed is indicated by a bold double strikeout. In addition, a summary of all comments regarding the original proposal and staff responses is included.

Any written comments on these modifications must be received by 5:00 p.m. on *Thursday, January 20, 2022* at the Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833 or submitted by fax to (916) 274-5743 or e-mailed to oshsb@dir.ca.gov. Please confine your comments to the modification of the text. This proposal will be scheduled for adoption at a future business meeting of the Standards Board.

The Standards Board's rulemaking files on the proposed action are open to public inspection BY APPOINTMENT Monday through Friday, from 8:00 a.m. to 4:30 p.m., at the Standards Board's office at 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833. Appointments can be scheduled via email at oshsb@dir.ca.gov or by calling (916) 274-5721.

Inquiries concerning the proposed changes may be directed to the Executive Officer, Christina Shupe, at (916) 274-5721.

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

A handwritten signature in black ink that reads "Christina Shupe". The signature is written in a cursive style and is positioned above a solid horizontal line.

Date: *January 5, 2022*

Christina Shupe, Executive Officer

PROPOSED MODIFICATIONS
(Modifications are indicated in bold,
double underline wording for new language,
and bold, double strikeout for deleted language.)

**STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

Article 10.1. Personal Protective Clothing and Equipment for Fire Fighters.

Add new Section 3402.3 to read:

§3402.3. Selection, Inspection, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting.

(a) Structural and proximity fire fighting protective ensembles shall be selected, inspected, and maintained in accordance with the National Fire Protection Association (NFPA) 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 Edition, which is hereby incorporated by reference.

EXCEPTION: In addition to the recordkeeping requirements of ~~Section~~ **subchapter 4.3** of Chapter 4, Program of the NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 Edition, which is hereby incorporated by reference, the employer shall maintain records on its structural and proximity fire fighting protective ensemble and ensemble elements for three years from the date of retirement.

(b) Helmets that do not meet the requirements of NFPA 1971, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2007 Edition, which is hereby incorporated by reference, shall be retired 10 years from the date of manufacture.

(c) Effective Dates.

(1) **Subchapter 4.1 (General), subchapter 4.2 (Program Organization for Structural Fire Fighting Ensembles and Ensemble Elements and Proximity Fire Fighting Ensembles and Ensemble Elements), and subchapter 4.3 (Records) of Chapter 4 (Program), Chapter 5 (Selection), Chapter 6 (Inspection), Chapter 7 (Cleaning and Decontamination), Chapter 8 (Repair), Chapter 9 (Storage), and Chapter 12 (Test Procedures) of NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 Edition, which is hereby incorporated by reference, shall be effective [OAL will insert this date 1 year from OAL's effective date].**

(2) Chapter 10 (Retirement, Disposition, and Special Incident Procedure) of NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 Edition, which is hereby incorporated by reference, and subsection (b) shall be effective [OAL will insert this date. 3 years from OAL's effective date].

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Sections 142.3, Labor Code and 6303(c), Labor Code.

SUMMARY AND RESPONSES TO WRITTEN AND ORAL COMMENTS

SUMMARY AND RESPONSES TO WRITTEN AND ORAL COMMENTS

I. Written Comments

1. Eric Berg, Deputy Chief of Health and Mike Wilson, Senior Industrial Hygienist, Research and Standards Health Unit, Division of Occupational Safety and Health (Cal/OSHA) by letter dated November 18, 2021.

Comment #1:

Cal/OSHA appreciated the amended text in subsection 3409(c)(2), which they believe strengthens this provision by requiring that the employer be able to demonstrate that a lesser level of protection will (in actual practice during overhaul) provide for employee safety:

(c)(2) SCBA shall be worn during overhaul operations unless the employer can demonstrate that a lesser level of protection ~~is appropriate~~ provides for employee safety."

However, Cal/OSHA believes that the performance-based requirement must include an employee participation element, similar to subsection (q) of the Process Safety Management for Petroleum Refineries (CCR title 8, §5189.1) standard. Inclusion of such an element provides a structured way for fire department employers and employees to jointly develop standard operating procedures (SOPs) that address the practical meaning of the phrases, "lesser level of protection" and "provides for employee safety," in the context of overhaul.

Cal/OSHA recommends that the overhaul provisions of section 3409(c) be revised to include the "right of employees to participate 'throughout all phases'" in the development of SOPs in order to ensure the appropriate use of SCBAs during overhaul and to define when a "lesser level of protection" will effectively provide for employee safety.

Response #1:

See Summary and Responses to Written and Oral Comments to the 45-Day-Notice, issued on October 29, 2021, commenter no. 3, comment and response #11.

The Board acknowledges this comment but notes that Cal/OSHA's suggestions do not address the modifications to the initial proposal contained in the 15-Day Notice. In addition, the suggestion to create proposed text similar to section 5189.1(q) is outside the scope of AB 2146 (2014), which was intended to align certain safety orders relating to PPE for firefighters with standards published by the National Fire Protection Association (NFPA). Therefore, the Board will not modify the proposal further in response to this comment.

The 2021 edition of NFPA 1500 contains updated standards regarding overhaul, which will be included in the agenda for the 2022 advisory committee meeting(s).

Comment #2:

Cal/OSHA appreciated the deletion of proposed section 3410.1(c)(1) and (c)(2) and agrees with Board staff “that a more robust and detailed discussion needs to take place in order to craft language that address(es) the complexities of respiratory protection for wildland fire fighters.” Given the scale and pace of California’s wildfires in recent years, Cal/OSHA strongly supports an expedited WUI firefighting process in 2022 to develop respiratory requirements that include:

1. A specific focus on the use of fire-rated, powered air purifying respirators (PAPRs), rather than traditional non-powered air-purifying cartridge respirators (APRs), as distinguished in both the 2011 and 2022 versions of the National Fire Protection Association (NFPA) Standard 1984;
2. A risk assessment that employers must undertake as part of using fire-rated PAPRs during WUI/wildland operations;
3. An evaluation process under actual WUI/wildland firefighting conditions to assess the efficacy of fire-rated PAPRs under a range of conditions, including fire-line work, structure protection, search and rescue, evacuation operations, and overhaul of burned-over areas;
4. Provisions giving employees the right to participate alongside managers in the development of SOPs for the use of fire-rated PAPRs; and
5. A process to document the rationale when a decision is made by employer to use or not to use PAPRs during WUI or wildland firefighting.

Cal/OSHA also commented that the right of employees to participate “throughout all phases” of safety decision-making has been established in the Process Safety Management for Petroleum Refineries standard, subsection (q) (CCR title 8, §5189.1).

Response #2:

The Board acknowledges this comment but notes that Cal/OSHA’s suggestions do not address the modifications to the initial proposal contained in the 15-Day Notice. Therefore, the Board will not modify the proposal further in response to this comment.

While the focus of the 2022 advisory committee meetings is to perform the work mandated by AB 2146 (2014), Cal/OSHA will have an opportunity to present their proposed amendments and their supporting rationale during the 2022 advisory committee meetings.

Comment #3

Cal/OSHA appreciates the new definition for “Wildland Urban Interface” but believes the regulation should unambiguously apply to firefighters operating in both WUI and wildland conditions, as defined. This is important because WUI conditions are distinct from both wildland and structural firefighting. For example, when firefighters are operating in neighborhoods with structure fires that were initiated by a wildland fire, they do not engage in traditional structural firefighting, nor do they engage in traditional wildland firefighting. They are often operating

under conditions of heavy smoke and heat (typical of a structure fire), while also operating in the vast, fast moving, rapidly expanding conditions of a wildland fire. The regulation must be clear that firefighters operating under these conditions in the WUI are covered by the standard.

The NFPA now clearly distinguishes wildland and WUI firefighting. The 2016 version of NFPA 1977 (*Standard on Protective Clothing and Equipment for Wildland Fire Fighting*) does not include WUI firefighting as a condition that falls under the definition of “wildland firefighting.” This was remedied in the 2022 version of NFPA 1977 (issued March 18, 2021), now titled *Standard on Protective Clothing and Equipment for Wildland Fire Fighting and Urban Interface Fire Fighting*. Similarly, the 2022 version of NFPA 1984 (issued March 18, 2021) adds WUI to the title: *Standard on Respirators for Wildland Fire-Fighting and Wildland Urban Interface Operations*. The proposed standard should reflect the approach taken by the NFPA and explicitly include WUI wherever the term “wildland” appears.

Response #3

The Board acknowledges this comment but notes that Cal/OSHA’s suggestions do not address the modifications to the initial proposal contained in the 15-Day Notice. Therefore, the Board will not modify the proposal further in response to this comment.

The Board will hold advisory committee meetings as required by AB 2146 (2014) in 2022 to consider additional protections for WUI firefighting recommended in the more current editions of the NFPA standards and other suggestions that will be raised by committee members within the scope of AB 2146 (2014). Cal/OSHA will have an opportunity to present their proposed amendments to the committee.

The Board thanks Eric Berg and Mike Wilson for their comments and participation in the Board’s rulemaking process.

2. Brian Rice, President of California Professional Firefighters (CPF), Tim Edwards, President of CAL FIRE Firefighters Local 2881, and Rick Swan, Director of Health & Safety Operational Services of International Association of Fire Fighters (IAFF), by letter dated November 18, 2021.

Comment

In regard to the proposed modifications issued on October 29, 2021, CPF, CAL FIRE Firefighters Local 2881, and IAFF (Coalition) expressed their appreciation and support for the removal of section 3410.1(c) relating to wildland respiratory protection. Respiratory protection in the wildland and wildland urban interface remains a difficult challenge. They support the proposal to quickly initiate an advisory committee process and plan to participate in the advisory committee meetings.

The Coalition asserts that the regulation needs to be updated to help push for improvements in this arena but also recognize that more work needs to be completed to protect firefighters in California. The rules regarding wildland respiratory protection must include a clear process for a

field evaluation of new technology and that process must include both labor and management in all phases of decision-making about utilization and purchase of this equipment.

The Coalition were disappointed by the non-acceptance of their proposed changes to section 3409(c)(2). They believe that there is no sound reasoning to exclude labor from the process to determine when an incident commander can determine when a firefighter should not use their SCBA during overhaul. They restated their prior comments; see commenter no. 4, comments and responses #6, #7 and #9 of the Summary and Responses to Written and Oral Comments to the 45-Day Notice, issued on October 29, 2021. In their view, the existence of employer obligations in the proposed regulations do not provide valid reasons to not require that labor have an explicit role in development of the employer's standard operating procedures.

The Coalition would support a path forward to adopt these regulations if, as part of the motion and vote, the following conditions are adopted by the Standards Board:

1. Clearly articulate purchase and wear standards: Within six months, develop a frequently asked questions, or if necessary, bring back a rulemaking to the Standards Board, that clearly articulates the interaction of the purchase and wear standards in the regulation to ensure that employers clearly understand the incentives to purchase PPE that is compliant with the most recently published NFPA standard.
2. Robust Firefighter/Labor Participation: Within six months, bring back a rulemaking that ensures robust labor/firefighter participation in all phases of personal protective equipment purchasing and use, including:
 - a. Processes for authorized labor representatives to be a part of personal protective equipment decision making.
 - b. Clear rules that provide a labor seat at the table for determining standard operating procedures for determining how an incident commander determines that a SCBA should not be used during overhaul operations.
 - c. Clear documentation and reporting mechanisms when exclusions in the regulation are exercised.
3. Wildland Respiratory Protections: Within one year, following an advisory group process as proposed in the 15-day package, propose to the Standards Board a standard for wildland firefighter respiratory protection that includes:
 - a. A field evaluation process that must take place before certifying a respiratory protection device suitable for wildland and/or wildland urban interface firefighting operations
 - b. A clear timeline for equipment acquisition if approved through the field evaluation process
 - c. Clear processes for firefighter and labor engagement in the field evaluation process.

Response

The advisory committee convened in 2015 accomplished the work directed by AB 2146 (2014). The committee reviewed the NFPA standards related to PPE that were in effect in 2015-2016 and proposed changes to the existing regulations to align with the NFPA standards to provide greater personal protection.

Board staff intends to convene advisory committee meetings in 2022 to fulfill the requirements of AB 2146 (2014) and subsequently Labor Code section 147.4(c). Standards Board staff, in consultation with stakeholders, will review revisions to NFPA standards pertaining to personal protective equipment covered by the General Industry Safety Orders (GISO) in sections 3403 to 3411, inclusive, of title 8, California Code of Regulations, Article 10.1 (commencing with section 3401). If the review finds that the revisions to applicable NFPA standards provide a greater degree of personal protection than the GISO, a proposal will be developed for consideration of the Board.

The NFPA standards covering the selection of firefighter PPE are:

- NFPA 1851, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*
- NFPA 1852, *Standard on Selection, Care, and Maintenance of Open-Circuit Self-Contained Breathing Apparatus (SCBA)*
- NFPA 1877, *Standard on Selection, Care, and Maintenance of Wildland Firefighting Protective Clothing and Equipment*

In 2016, the committee developed section 3410 because there was no counterpart for wildland fire fighting to the NFPA 1851, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*. Since then, the NFPA 1877, *Standard on Selection, Care, and Maintenance of Wildland Firefighting Protective Clothing and Equipment*, 2022 edition has been published. The committee members will discuss if NFPA 1877 should be incorporated by reference to replace section 3410.

NFPA 1500, *Standard on Fire Department Occupational Safety, Health, and Wellness Program*, specifically Chapter 7 (Protective Clothing and Protective Equipment) covers the use of PPE. The standard specific to respirators for wildland firefighting is NFPA 1984, *Standard on Respirators for Wildland Fire Fighting Operations*.

The Coalition's request for new regulations and guidance outside the requirements of AB 2146 (2014), such as the development of an FAQ or explicit roles for labor, are beyond the scope of this rulemaking. See commenter no. 1, comments and responses #1 and #2.

The Board thanks Brian Rice, Tim Edwards, and Rick Swan for their participation in the Board's rulemaking process.

3. Jeremy Lawson, Staff Chief of CAL FIRE, by letter dated November 18, 2021.

Comment #1:

CAL FIRE stated that the proposed regulation would likely have a currently unquantifiable impact on CAL FIRE operations if it were to immediately take effect. CAL FIRE has not had the opportunity to internally evaluate the fiscal costs and operational issues associated with ensuring its compliance with the proposed regulation, but due to potential fiscal and operational impacts, CAL FIRE requests proposed section 3402.3, which incorporates by reference NFPA 1851, Chapter 7, to delay the effective date to July 2025 instead of a year from OAL effective date. CAL FIRE stated that the additional time would give CAL FIRE one full budget cycle to request additional funding from various sources, strategically place resources and implement policy consistent with the regulation.

Response #1

The Board acknowledges this comment but notes that CAL FIRE's suggestions do not address the modifications to the initial proposal contained in the 15-Day Notice. Therefore, the Board will not modify the proposal further in response to this comment.

The extended effective dates in section 3402.3(c) take into account budget cycles and provide additional time for the implementation of section 3402.3. CAL FIRE's proposed extended deadline to July 2025 would cause California to be two editions behind the review of NFPA 1851. Therefore, the Board will not further extend effective dates for section 3402.3(c).

Comment #2

CAL FIRE believes the record retention in proposed section 3410(g) is unduly burdensome. The data that must be tracked, to do so optimally with an organization of CAL FIRE's size, would require a complex software program. CAL FIRE can put into the Department's PPE plan what each worksite/station must keep track of for wildland, structure, proximity and SCBA gear and let them implement their own spreadsheets or tracking mechanisms, but processes will not be aligned. There would not be oversight of the data that encompasses the Department as a whole and that could lead to CAL FIRE being cited repeatedly as an organization under SB 606 (2021).

Response #2

The Board acknowledges this comment but notes that CAL FIRE's suggestions do not address the modifications to the initial proposal contained in the 15-Day Notice. Therefore, the Board will not modify the proposal further in response to this comment.

NFPA requires the following records to be obtained for each protective ensembles:

- (1) Person whom the element is issued.
- (2) Date and condition when issued.
- (3) Manufacturer and model name or design.
- (4) Manufacturer's identification number, lot number, or serial number.

- (5) Month and year of manufacture.
- (6) Date(s) and finding(s) of advanced inspection(s).
- (7) Date(s) and finding(s) of advance cleaning or decontamination.
- (8) Reason for advanced cleaning or decontamination and who performed the cleaning or decontamination.
- (9) Date(s) of repair(s), who performed repair(s), and brief description of repair(s).
- (10) Date of retirement.
- (11) Date and method of disposal.

The recordkeeping requirements of NFPA 1851 (2014), subchapter 4.3, (Records) are not unduly burdensome. Items (1) through (5), and (10) and (11) are information that will be collected by the employer once per issuance of the PPE. Items (6) through (9) are information that will be collected by the Manufacturer Trained Organization or Verified Independent Service Provider (VISP) at least annually or per occurrence. Such records are to be made available to the employer. The employer can be considered a manufacturer trained organization with proper training from the manufacturer.

The benefits of recordkeeping outweigh the efforts of keeping a record. Records can be used to provide information about: user(s) of the PPE; the number of users per PPE (if shared); the life cycle of protective ensembles and ensemble elements, repair and decontamination efforts; and to compare the effectiveness of elements that are made of different materials or by different manufacturers.

Comment #3

The provisions do not have an effective date for Chapter 4 (4.3 records requirement) as they do for Chapters 5-7 and Chapter 10 of NFPA 1851. CAL FIRE is requesting at least six months to revise and implement their PPE plan instructing worksites to include all the elements that must be tracked by each worksite, at least until an all-encompassing tracking system can be put into place.

Response #3

The Board acknowledges this comment but notes that CAL FIRE's suggestions do not address the modifications to the initial proposal contained in the 15-Day Notice. However, since the implementation of the program elements, Chapters 5, 6, 7, 8, 9, and 12 have a delayed effective date, it follows that the written program describing the program elements should also have a delayed effective date. Therefore, the Board accepts CAL FIRE's comment and will modify proposed section 3402.3(c)(1) to include subchapter 4.1 (General), subchapter 4.2 (Program Organization for Structural Fire Fighting Ensembles and Ensemble Elements and Proximity Fire Fighting Ensembles and Ensemble Elements), and subchapter 4.3 (Records) of Chapter 4, with an effective date of one year from the OAL effective date, to provide clarity and consistency.

The effective date for NFPA 1851, subchapter 4.4 (Manufacturer's Instruction), subchapter 4.5 (Protecting the Public and Personnel from Contamination), and subchapter 4.6 (Reporting Personal Protective Equipment Health and Safety Concerns) will not be amended. The standards

under said subchapters, if adopted by the Board, will be effective on one of four quarterly dates based on when the final regulations are filed with the Secretary of State.

The standards in subchapter 4.4 (Manufacturer's Instruction), for employers to provide users with the instructions provided by the manufacturer on the care, use and maintenance of the protective ensembles or ensemble elements, including any warnings provided by the manufacturer, is already required under the IIPP. Therefore, subchapter 4.4 does not require delayed implementation.

Additionally, establishing safe practices listed under NFPA 1851, subchapter 4.5, to protect personnel from contaminated PPE does not warrant delay. These include:

- Protective ensembles or ensemble elements not be worn or stored in the living areas of fire department facilities.
- Soiled or potentially contaminated protective ensembles or ensemble elements shall not be worn in public except during emergency operations.
- Soiled or potentially contaminated ensembles or ensemble elements shall not be brought into the home, washed in home laundries, or washed in public laundries.

Lastly, requirements in subchapter 4.6, regarding the reporting of PPE health and safety concerns to the element manufacturer and certification organizations if the concern is caused by a known or suspected element failure need not be delayed. Notification can be accomplished through an email or memo. Delaying the requirement to inform manufacturers of possible equipment failure could have serious consequences to health and safety of firefighters.

Comment #4

In regard to the NFPA 1851 requirement for advanced inspections, which requires an annual inspection by a manufacturer trained organization for all structural and proximity firefighting ensembles. CAL FIRE may need an additional position in every Unit to manage the annual inspection process; this position could also manage the tracking and record retention element at the unit level.

CAL FIRE would need to ensure Forestry Logistics Officers (FLOs) in each Unit are trained and worksites will need to take their ensembles to FLOs for annual inspections. This may be burdensome for the Unit FLOs and for the manufacturers in the beginning.

Response #4

The Board acknowledges this comment but notes that CAL FIRE's suggestions do not address the modifications to the initial proposal contained in the 15-Day Notice. Therefore, the Board will not modify the proposal further in response to this comment.

The Board thanks CAL FIRE for identifying additional resources that will be needed to implement NFPA 1851, therefore protecting the health and safety of fire fighters in California, and supports its efforts in this regard.

The Board thanks Staff Chief Lawson for his comments and participation in the Board's rulemaking process. Additionally, the Board looks forward to CAL FIRE's participation in subsequent rulemaking efforts.

II. Oral Comments

Oral comment received at the November 18, 2021 Public Hearing via Webex.

1. Kevin Greene, EMS Health and Safety Director for the California Professional Firefighters (CPF).

Comment:

CPF believes that the current proposal has the following deficiencies:

- Labor input and clear reporting are not included in the requirements to use SCBA during overhaul.
- Labor need a clearly defined seat at the table in the development of standard operating procedures and in making purchase decisions.

CPF suggested a path forward as described in the written comments via letter submitted November 18, 2021.

Response:

Please see response to written commenter no. 2, comment and response.

The Board thanks Kevin Greene for his comment and participation in the Board's rulemaking process.